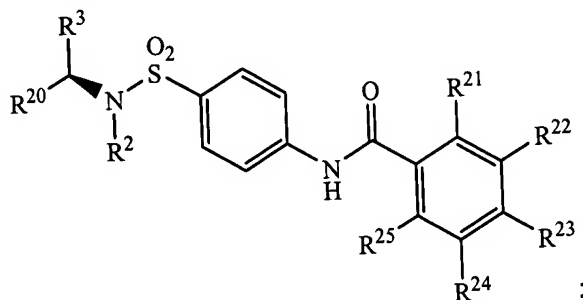


Amended Claims

1. **(currently amended)** A compound; an enantiomer, diastereomer, racemate, or tautomer of the compound; or a salt of the compound, enantiomer, diastereomer, racemate, or tautomer, wherein:

the compound has the following structure:



R^2 is morpholinylalkyl;

R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, alkylaryl, arylalkyl, alkoxy, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, haloalkoxy, and haloalkylthio;

R^{20} is selected from the group consisting of $-C(O)OH$, $[-C(O)NHOH]$, $-SH$, and $-C(O)SH$; and

R^{21} , R^{22} , R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of H, C_1 to about C_{20} alkyl, C_1 to about C_{20} alkenyl, C_1 to about C_{20} alkynyl, cycloalkyl, haloalkyl, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, nitroalkyl, alkoxy, cycloalkoxy, alkoxycarbonyl, alkoxyalkyl, haloalkoxy, haloalkylthio, alkylamino, and carboxyalkyl.

2. **(currently amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 1 wherein R^{20} is ~~selected from the group consisting of $-C(O)OH$ and $-C(O)NHOH$.~~

3. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 2 wherein R^{21} and R^{25} are H.

4. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 3 wherein R^{22} and R^{24} are H.

5. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 4 wherein R^{23} is C_1 to about C_{20} alkyl.

6. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 5 wherein R^{23} is C_1 to about C_{20} linear alkyl.

Claim 7 (canceled).

8. **(currently amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 2 **[[7]]** wherein R^3 is selected from the group consisting of alkyl, alkenyl, alkynyl, haloalkoxy, and haloalkylthio **[[,]]**.

Claim 9 (canceled).

10. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 8 wherein R^2 is 2-(N-morpholino)ethyl.

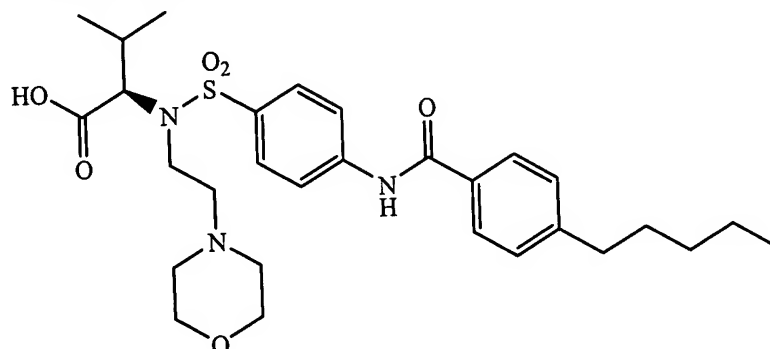
Claim 11 (canceled).

12. **(currently amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 6 **[[11]]** wherein R^3 is selected from the group consisting of alkyl, alkenyl, alkynyl, haloalkoxy, and haloalkylthio.

Claim 13 (canceled).

14. **(currently amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 6 **[[12]]** wherein R^2 is 2-(N-morpholino)ethyl.

15. **(previously amended)** The compound, enantiomer, diastereomer, racemate, tautomer, or salt of claim 10 wherein the compound has the following structure:

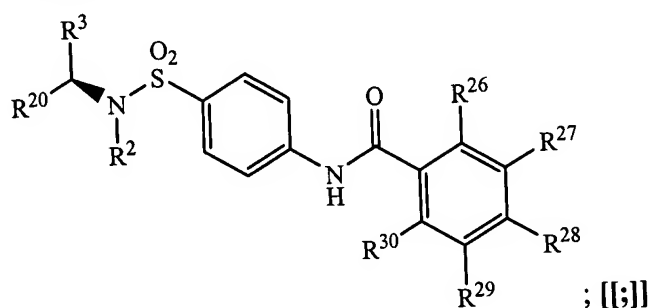


Claims 16-18 (canceled).

19. **(currently amended)** A method of changing the conformation of a matrix metalloproteinase, wherein:

the method comprises contacting the matrix metalloproteinase with a compound; an enantiomer, diastereomer, racemate, or tautomer of the compound; or a salt of the compound, enantiomer, diastereomer, racemate, or tautomer;

the compound has the following formula:



R^2 is morpholinylalkyl;

R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, alkylaryl, arylalkyl, alkoxy, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, haloalkoxy, and haloalkylthio;

R^{20} is selected from the group consisting of -C(O)OH, [-C(O)NHOH,] -SH, and -C(O)SH; and

R^{26} , R^{27} , R^{28} , R^{29} , and R^{30} are independently selected from the group consisting of about C_3 to about C_{20} alkyl, about C_3 to about C_{20} alkenyl, about C_3 to about C_{20} alkynyl, cycloalkyl, haloalkyl, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, nitroalkyl, alkoxy, cycloalkoxy, alkoxycarbonyl, alkoxyalkyl, haloalkoxy, haloalkylthio, alkylamino, and carboxyalkyl.

20. **(currently amended)** The method of claim 19 wherein R^{20} is ~~selected from the group consisting of~~ $-C(O)OH$ ~~and~~ $-C(O)NHOH$.

21. **(previously amended)** The method of claim 19 wherein R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, haloalkoxy, and haloalkylthio.

22. **(original)** The method of claim 21 wherein R^3 is a C_1 to about C_{12} alkyl.

23. **(original)** The method of claim 22 wherein R^3 is a C_1 to about C_4 alkyl.

24. **(original)** The method of claim 23 wherein R^3 is isopropyl.

Claim 25 (canceled).

26. **(previously amended)** The method of claim 19 wherein R^2 is 2-(N-morpholino)ethyl.

27. **(original)** The method of claim 19 wherein R^{26} and R^{30} are H.

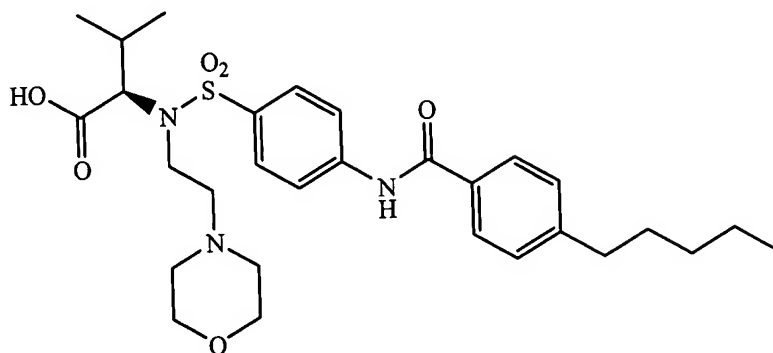
28. **(original)** The method of claim 27 wherein R^{27} and R^{29} are H.

29. **(original)** The method of claim 28 wherein R^{28} is about C_3 to about C_{20} alkyl.

30. **(original)** The method of claim 29 wherein R^{28} is about C_3 to about C_{20} linear alkyl.

31. **(original)** The method of claim 30 wherein R^{28} is selected from the group consisting of n-propyl, n-butyl, n-pentyl and n-hexyl.

32. **(previously amended)** The method of claim 31 wherein the compound has the following structure:

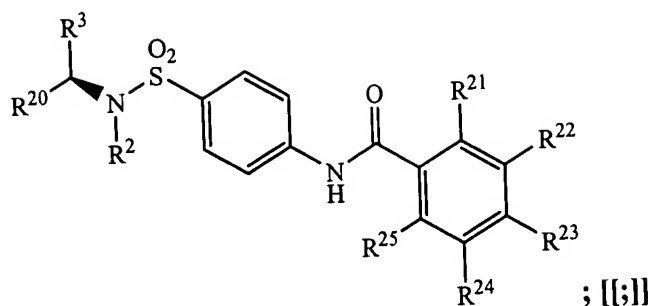


Claims 33-36 (canceled).

37. **(previously amended)** The method of claim 19 wherein the matrix metalloproteinase is MMP-8.

38. **(previously amended)** The method of claim 19 wherein the matrix metalloproteinase is MMP-13.

39. **(currently amended)** A method of inhibiting a matrix metalloproteinase, wherein:
the method comprises contacting the matrix metalloproteinase with a compound; an enantiomer, diastereomer, racemate, or tautomer of the compound; or a salt of the compound, enantiomer, diastereomer, racemate, or tautomer;
the compound has the following formula:



R^2 is morpholinylalkyl;

R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, alkylaryl, arylalkyl, alkoxy, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, haloalkoxy, and haloalkylthio;

R^{20} is selected from the group consisting of $-C(O)OH$, $[-C(O)NHOH,]$ $-SH$, and $-C(O)SH$; and

R^{21} , R^{22} , R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of H, C_1 to about C_{20} alkyl, C_1 to about C_{20} alkenyl, C_1 to about C_{20} alkynyl, cycloalkyl, haloalkyl, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, nitroalkyl, alkoxy, cycloalkoxy, alkoxyalkyl, haloalkoxy, haloalkylthio, alkylamino, and carboxyalkyl.

40. **(currently amended)** The method of claim 39 wherein R^{20} is ~~selected from the group consisting of $-C(O)OH$ and $-C(O)NHOH$.~~

41. **(previously amended)** The method of claim 39 wherein R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, haloalkoxy, and haloalkylthio.

42. **(original)** The method of claim 41 wherein R^3 is a C_1 to about C_{12} alkyl.

43. **(original)** The method of claim 42 wherein R^3 is a C_1 to about C_4 alkyl.

44. **(original)** The method of claim 43 wherein R^3 is isopropyl.

Claim 45 (canceled).

46. **(previously amended)** The method of claim 39 wherein R^2 is 2-(N-morpholino)ethyl.

47. **(original)** The method of claim 39 wherein R^{21} and R^{25} are H.

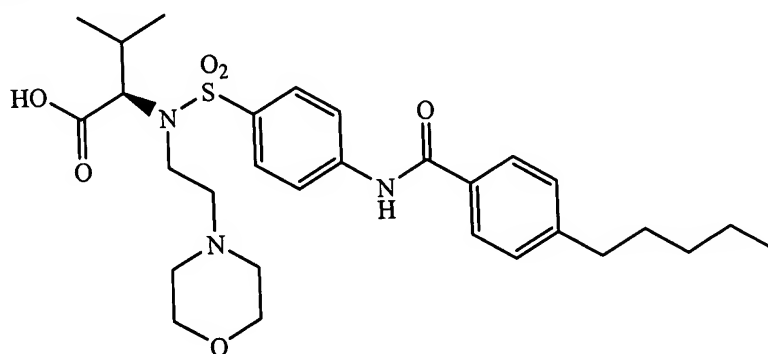
48. **(original)** The method of claim 47 wherein R^{22} and R^{24} are H.

49. **(original)** The method of claim 48 wherein R^{23} is C_1 to about C_{20} alkyl.

50. **(original)** The method of claim 49 wherein R^{23} is methyl or C_2 to about C_{20} linear alkyl.

51. **(original)** The method of claim 50 wherein R^{23} is n-pentyl or n-hexyl.

52. **(previously amended)** The method of claim 51 wherein the compound has the following structure:

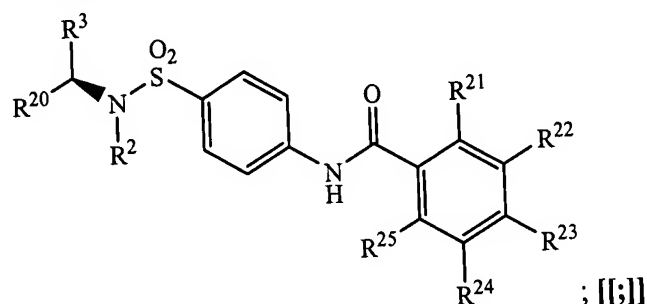


Claims 53-56 (canceled).

57. **(previously amended)** The method of claim 39 wherein the matrix metalloproteinase is MMP-8.

58. **(previously amended)** The method of claim 39 wherein the matrix metalloproteinase is MMP-13.

59. **(currently amended)** A method treating osteoarthritis in a mammal, wherein:
 the method comprises providing to the mammal an osteoarthritis-treating-effective
 amount of a compound; an enantiomer, diastereomer, racemate, or tautomer of the compound; or
 a salt of the compound, enantiomer, diastereomer, racemate, or tautomer;
 the compound has the following formula:



R^2 is morpholinylalkyl;

R^3 is selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, alkylaryl, arylalkyl, alkoxy, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, haloalkoxy, and haloalkylthio;

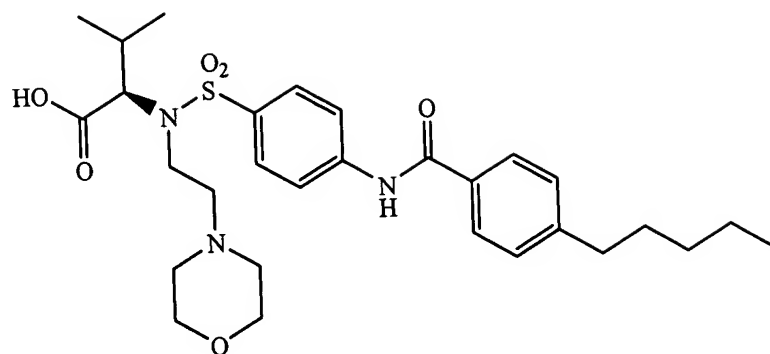
R^{20} is selected from the group consisting of $-C(O)OH$, $[-C(O)NHOH,]$ $-SH$, and $-C(O)SH$; and

R^{21} , R^{22} , R^{23} , R^{24} , and R^{25} are independently selected from the group consisting of H, C_1 to about C_{20} alkyl, C_1 to about C_{20} alkenyl, C_1 to about C_{20} alkynyl, cycloalkyl, haloalkyl, alkoxyalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, nitroalkyl, alkoxy, cycloalkoxy, alkoxycarbonyl, alkoxyalkyl, haloalkoxy, haloalkylthio, alkylamino, and carboxyalkyl.

60. **(original)** The method of claim 59 wherein the mammal is a human.

61. **(previously amended)** The method of claim 60 wherein the compound has the following structure:

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Amendment C
October 9, 2003



Claims 62-64 (canceled).